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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,678	03/10/2000	Kenneth L. Levy	Levy-SR	5873

7590                    08/01/2002

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COBY, FRANTZ

[REDACTED] ART UNIT      [REDACTED] PAPER NUMBER

2171

DATE MAILED: 08/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

	Application No. <b>09/522,678</b>	Applicant(s) <b>Levy</b>
	Examiner <b>Frantz Coby</b>	Art Unit <b>2171</b>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on Mar 10, 2000

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 1-20 is/are pending in the application.

4a) Of the above, claim(s) NONE is/are withdrawn from consideration.

5)  Claim(s) NONE is/are allowed.

6)  Claim(s) 1-20 is/are rejected.

7)  Claim(s) NONE is/are objected to.

8)  Claims NONE are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1)  Notice of References Cited (PTO-892)

4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3

6)  Other:

Art Unit: 2171

This is in response to application filed on march 10 2000 in which claims 1-20 are presented for examination.

***Information Disclosure Statement***

1. The information disclosure statement filed on March 03, 2000 is in compliance with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been placed in the application file, and the information referred to therein has not been considered as to the merits.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 16-20 are rejected under 35 U.S.C. 112, first paragraph, because claim 16 recites a single means. A single means claim, i.e. where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112 first paragraph. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983).

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2171

5. Claims 1-7, 9-14, 16, 18 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the digital data" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the digital data" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the original signal" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the difficulty" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the content degradation " in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the difficulty" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the content degradation " in line 4. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2171

Claim 4 recites the limitation "the degradation process" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the difficulty" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the original signal " in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the degradation process" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the difficulty" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the original signal " in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the content" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the content degraded " in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the digital data" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2171

Claim 10 recites the limitation "the original digital data" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the degraded data" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the difficulty" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the content degradation " in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the difficulty" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the content degradation " in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the recovery process" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the point after the threshold crossing by the inverse of the scaling value " in lines 2-4. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2171

Claim 14 recites the limitation "the recovery process " in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the efficient" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the memory " in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "the degraded content" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki U.S. Patent no. 5,630,044.

Art Unit: 2171

As per claims 1 and 10, Suzuki discloses a process that includes searching digital data for detecting criteria (See Suzuki col. 2, lines 2-9). In particular, Suzuki discloses “adjusting neighboring points whereby said digital data is degraded in quality but an original signal of said digital data is recoverable (See Suzuki Col. 1, line 40 to col. 3, line 60).

As per claim 16, all the limitations of this claim have been noted in the rejection of claim 1. It is therefore rejected as set forth above.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-3, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki U.S. Patent no. 5,630,044 in view of Shyu U.S. Patent no. 6,021,391.

As per claims 2-3 and 11-12, most of the limitations of these claims have been noted in the rejection of claims 1 and 10. Applicant's attention is directed to the rejection of claims 1 and 10 above.

Art Unit: 2171

Although Suzuki discloses a detection means, it is noted that Suzuki did not specifically detail the claimed feature “detection criteria involves a pseudo random sequence” or “adjustment of neighboring points involves a pseudo random sequence” as recited in the instant claims 2 and 3; 11 and 12. On the other hand, Shyu discloses a method and system for dynamic data encryption including a scrambling field type which allows the scrambling algorithm to be selected randomly (See Shyu Col. 3, lines 12-26).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the recovery system of Suzuki wherein the detection means provided thereof (See Suzuki Figure 2, component 20) would have incorporated the random scrambling teachings of Shyu. The motivation being to have enhanced the versatility of Suzuki by allowing it to provide a more efficient fault recovery system that can decrease the frequency of degradation processing to prevent the reduction of the system performance caused by degradation as much as possible (See Suzuki Col. 6, lines 27-31).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2171

11. Claims 4-9, 13-14, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki U.S. Patent no. 5,630,044 in view of Paneth et al. U.S. Patent no. 5,778,055.

As per claims 4-7, and 13-14, most of the limitations of these claims have been noted in the rejection of claims 1 and 10. Applicant's attention is directed to the rejection of claims 1 and 10 above.

It is noted however, Suzuki did not specifically detail the claimed feature "detection criteria includes a threshold crossing"; "the value of the threshold is a pseudo random sequence"; "scaling the point after the threshold crossing"; "the scaling value is a pseudo-random sequence" as recited in the instant claims 4-7 and 13-14. On the other hand, Paneth et al. disclose the aforementioned limitations as a detector that extracts digital information based on peaks in the received signal or by adding the signals with preset threshold values (See Paneth et al. Abstract; Col. 2, lines 44-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the recovery system of Suzuki wherein the detection means provided thereof (See Suzuki Figure 2, component 20) would have incorporated the threshold teachings of Paneth et al. The motivation being to have enhanced the versatility of Suzuki by allowing it to provide a more efficient fault recovery system that can decrease the frequency of degradation processing to prevent the reduction of the system performance caused by degradation as much as possible (See Suzuki Col. 6, lines 27-31).

Art Unit: 2171

As per claims 8-9, 15 and 20 the limitations of these claims have been noted in the rejection of claims 1 ,10 and 16. Applicant's attention is directed to the rejection of claims 1, 10 and 16 above. In addition, Paneth et al. disclose the claimed features "every Mth point is degradable in quality" (See Paneth et al. Figure 4) and "content is recovered with a filter that removes most of the content degraded" as filter 26 of figure 1 (Col. 4, line 41-col. 5, line 10).

As per claims 17-19 the limitations of these claims have been noted in the rejection of claims 1 ,10 and 16. Applicant's attention is directed to the rejection of claims 1, 10 and 16 above. In addition, Paneth et al. disclose a digital processor, random access memory and a combination of custom digital and analog circuitry (See Paneth et al. Figure 3).

*Conclusion*

**Any response to this action should be mailed to:**

Commissioner of Patents and trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 305-9051, (for formal communications  
intended for entry)

**Or:**

(703) 308-5357 (for informal of draft

Art Unit: 2171

communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz Coby whose telephone number is (703) 305-4006. The examiner can normally be reached Monday through Friday from 9:30 A.M. to 5:00 P.M.
  
13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-14367. The Fax phone number for this Group is (703) 746-7238; (703) 746-7239; (703) 746-7240.



**FRANTZ COBY  
PRIMARY EXAMINER**

*Technology Center 2171*

July 26, 2002